

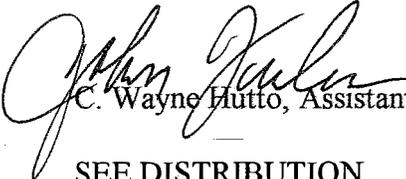
ORIGINAL TO GENERAL FILES

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE EDS-545(31) Jefferson County **OFFICE** Preconstruction
P. I. No. 222160 **DATE** July 25, 2002

FROM  C. Wayne Hutto, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT REVISED PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

CWH/cj

Attachment

DISTRIBUTION:

David Mulling
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Mike Thomas
BOARD MEMBER

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

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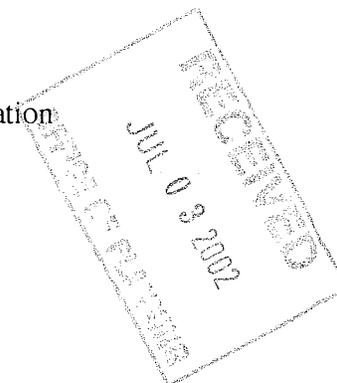
FILE EDS-545(31), Jefferson County OFFICE Environment/Location
PI # 222160

DATE July 2, 2002

FROM *Harvey D. Keepler/Key*
Harvey D. Keepler, State Environmental/Location Engineer

TO C. Wayne Hutto, Assistant Director of Preconstruction

SUBJECT Revised Project Concept Report – US 1/SR 4 Improvements



Attached is the original copy of the revised Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

For EDS-545(31), the proposed changes to the approved concept would be a revision to the typical section. The alignment would also be revised to reduce environmental impacts and to enhance intersection safety.

The revised concept as presented herein and submitted for approval is consistent with that which is included in the State Transportation Improvement Program (STIP).

DATE

7/9/02

Marta C. Rosen

State Transportation Planning Administrator

Distribution:

David Mulling
Philip Allen
Marta Rosen
Herman Griffin
Ben Buchan
Mike Thomas

REVISED PROJECT CONCEPT REPORT

Need and Purpose: US 1/SR 4 is the major north-south corridor in mid-east Georgia. The proposed projects, EDS-545(29),(30),(31) & (32) would widen and reconstruct US 1/SR 4 from the Wadley Bypass to SR 88 in Wrens. The existing roadway is reaching capacity and improvements would be required to maintain an acceptable level of service. Improvements would also eliminate congestion, enhance the traffic flow, and increase capacity while improving the operational characteristics and the safety along US 1/SR 4.

The US 1/SR 4 Improvements are part of the Governor's Road Improvement Program (G.R.I.P.). G.R.I.P. was initiated in the 1980's to address the importance of stimulating economic growth via an improved transportation network. It identified a system of economic development highways that consist of existing primary routes, plus additional truck connector routes. The system would place 98 percent of the state's population within 20 miles of a multi-lane highway. It would provide access for oversized trucks to cities having populations between 2,000 people and 5,000 people. Among the many benefits of such a system, areas lagging in growth would be provided greater opportunities to attract industry, business and jobs.

Project Location: EDS-545(31) would be located along US 1/SR 4 and would begin at milepost 14.44 and end at milepost 20.15 in Jefferson County.

Description of the approved concept: The approved concept for EDS-545(31) in Jefferson County is proposed to widen and reconstruct US 1/SR 4 from CR 325/Old US 1 to CR 138/Mennonite Church Road in Jefferson County. The project would begin at CR 325/Old US 1 on the north end of Louisville and would proceed north with urban widening on the east side consisting of 4 lanes with a 20 foot raised median. East side widening would continue to just north of CR 304/Country Club Road, where the typical section would taper out to 4 lanes with a 44 ft. grassed median. East side widening would continue north for approximately 1.0 mile, shift to west side widening to avoid an eligible historic resource, then shift back to east side widening to avoid another eligible historic resource at CR 142/Bridges Road. Just north of CR 142/Bridges Road, widening would shift to the west side and proceed to just south of SR 296, then shift back to east side widening. East side widening would continue north to approximately 0.5 miles north of CR 136/Mae Lamb Farm Road, then shift to west side widening for approximately 0.7 miles. Widening would then shift back to the east side and proceed north to the project's end at CR 138/Mennonite Church Road. Existing right-of-way along US 1/SR 4 is 130 feet. The proposed right-of-way would vary from 130 feet to 250 feet for the length of the project. The speed design would vary from 45 mph to 65 mph, and access would be by permit.

PDP Classification: Major/Construction on existing location

Full Oversight (), Exempt (X), SF (), Other ()

Functional Classification: Rural Principal Arterial

U. S. Route Number(s): 1

State Route Number(s): 4

Traffic (AADT) as shown in the approved concept:

Current Traffic		Design Traffic	
Year: 1997	ADT: 6500 – 10,600	Year: 2017	ADT: 10,400 – 16,800

Proposed Features to be revised:

EDS-545(31)

1. To comply with current DOT median guidelines, the typical section at the beginning of the project is recommended for revision.
2. In order to reduce environmental impacts, the proposed alignment is recommended for revision.
3. To enhance the safety of the intersection of US 1/SR 4 with SR 296, the intersection would be relocated.

Revised feature(s) to be approved:

EDS-545(31)

1. The approved urban 4 lane with a 20 foot raised median typical section from CR 325/Old US 1 to just north of CR 304/Country Club Road would be changed to an urban 4 lane with a 14 foot flush median typical section.
2. To avoid impacting a cemetery located at the intersection of SR 296/Harvey Street and US 1/SR 4 with off side shoulder improvements, the alignment of the proposed east side widening would be shifted slightly eastward to hold the existing western right-of-way. To avoid impacting an eligible historic resource, east side widening along US 1/SR 4 would shift to west side widening. It would begin 0.5 mile north of SR 296/Harvey Street and continue to just south of CR 397. At this point, west side widening would continue north as part of the approved concept.
3. To enhance the safety of the intersection at SR 296/Harvey Street and US 1/SR 4, SR 296 would be relocated to intersect US 1/SR 4 approximately 1100 feet north of the existing intersection.

Updated traffic data (AADT):

Current Traffic		Design Traffic	
Year: 2010	AADT: 9,400-15,500	Year: 2030	AADT: 14,900-24,500

Programmed/Schedule:

EDS-545(31)

P.E. September, 2001

R/W FY 2004

Construction FY 2006

Revised Cost Estimates:

EDS-545(31)

Construction cost including inflation and E&C:	\$ 10,255,000
Right-of-way:	\$ 2,429,150

Is the project located in a Non-attainment area? _____ Yes _____ X No

Recommendation: It is recommended that the proposed revisions to this concept be approved for implementation.

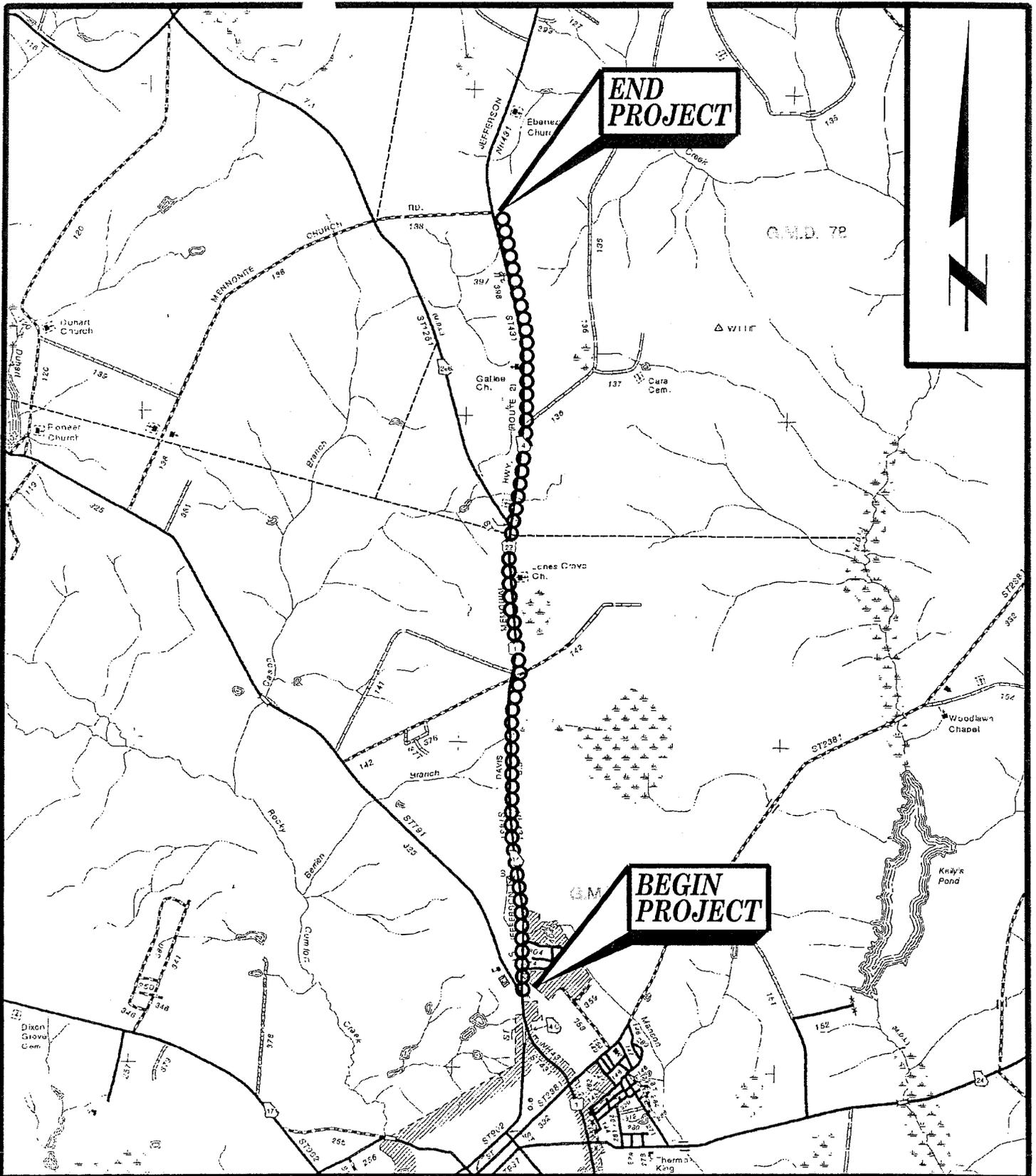
HDK/EKP

Attachments:

Sketch Map,
Cost Estimate
Typical Sections

Concur: Thomas R. Linn
Director of Preconstruction

Approve: Frank W. Daulton
Chief Engineer



SCALE IN MILES



LOCATION

STRIP MAP

EDS-545(31)
 US 158 4 IMPROVEMENTS
 JEFFERSON COUNTY

P.I.# 222160

PRELIMINARY COST ESTIMATE

Office of Environment/Location

June 27, 2002

County(s)

PI Number Project Number

Project Name Project Length Miles

Project Description

Existing Roadway

Comments

TRAFFIC:

Current Design Year Daily Volume (AADT)

Future Design Year Daily Volume (AADT)

Concept Estimate

Feasibility Estimate

Typical Section(s) Used in Estimate

Typical Section Length

<input type="text" value="Rural Widening: 2 To 4-Lanes with 44 ft Divided Median"/>	<input type="text" value="4.4"/> Miles
<input type="text" value="Urban Widening: 2 To 4-Lanes with 14 ft Flush Median"/>	<input type="text" value="0.0"/> Miles
<input type="text" value="Rural New Location: 4-Lanes with 44 ft Divided Median"/>	<input type="text" value="0.9"/> Miles
<input type="text" value="Urban Widening: 2 To 4-Lanes with 14 ft Flush Median"/>	<input type="text" value="0.5"/> Miles
<input type="text"/>	<input type="text"/> Miles
<input type="text"/>	<input type="text"/> Miles

Prepared By

Typical Section

Rural Widening: 2 To 4-Lanes with 44 ft Divided Median

Typical Section Length Miles

Right-of-Way Width Feet

GRADING AND DRAINAGE

- 1. EARTHWORK
 - a. Unclassified Excavation Soil
 - b. Unclassified Excavation Rock
 - c. Borrow Excavation
- 2. MINOR DRAINAGE

QUANTITY	UNIT COST	TOTAL
158,670 CY	2.50	397,000
17630 CY	10.00	176,000
	3.72	
4.4 MI	100,927	444,000
GRADING AND DRAINAGE SUBTOTAL		\$1,017,000

BASE AND PAVING

- 1. GRADED AGGREGATE BASE
- 2. ASPHALT PAVING
 - a. Asph Conc 9.5 mm Superpave
 - b. Asph Conc 19 mm Superpave
 - c. Asph Conc 25 mm Superpave
 - d. Bituminous Tack Coat
- 3. CONCRETE PAVING
 - a. Curb and Gutter
 - b. Miscellaneous
- 4. OTHER PAVING

THICKNESS AND SPREAD RATE	QUANTITY	UNIT COST	TOTAL
10"	57,769 TN	13.05	754,000
1 1/2" (165 LB/SY)	13,842 TN	34.55	478,000
3" (330 LB/SY)	17,463 TN	34.54	603,000
4" (440 LB/SY)	15,901 TN	34.62	550,000
	10,595 GL	0.82	9,000
	0 LF	9.39	0
	0 MI	28,410	0
			239,000
BASE AND PAVING SUBTOTAL			\$2,633,000

LUMP ITEMS

- 1. TRAFFIC CONTROL
- 2. CLEARING AND GRUBBING
- 3. LANDSCAPING
- 4. EROSION CONTROL
- 5. SIGNING/STRIPING
- 6. OTHER

QUANTITY	UNIT COST	TOTAL
4.4 MI	88,000	387,000
133 AC	6,000	800,000
4.4 MI	40,527	178,000
4.4 MI	99,000	436,000
4.4 MI	17,594	77,000
4.4 MI	110,500	486,000
LUMP ITEM SUBTOTAL		\$2,364,000

MISCELLANEOUS

- 1. GUARDRAIL
 - a. GUARDRAIL ANCHORS
- 2. DETOURS

QUANTITY	UNIT COST	TOTAL
	LF	10.11
	EA	435.59
	MI	300,000.00
MISCELLANEOUS SUBTOTAL		\$0

SPECIAL FEATURES

Typical Section

Rural New Location: 4-Lanes with 44 ft Divided Median

Typical Section Length Miles

Right-of-Way Width Feet

GRADING AND DRAINAGE

- 1. EARTHWORK
 - a. Unclassified Excavation Soil
 - b. Unclassified Excavation Rock
 - c. Borrow Excavation
- 2. MINOR DRAINAGE

QUANTITY	UNIT COST	TOTAL
11,610 CY	2.50	29,000
1,290 CY	10.00	13,000
32,800 CY	3.72	122,000
0.9 MI	101,000	91,000
GRADING AND DRAINAGE SUBTOTAL		\$255,000

BASE AND PAVING

- 1. GRADED AGGREGATE BASE
- 2. ASPHALT PAVING
 - a. Asph Conc 9.5 mm Superpave
 - b. Asph Conc 19 mm Superpave
 - c. Asph Conc 25 mm Superpave
 - d. Bituminous Tack Coat
- 3. CONCRETE PAVING
 - a. Curb and Gutter
 - b. Miscellaneous
- 4. OTHER PAVING

THICKNESS AND SPREAD RATE	QUANTITY	UNIT COST	TOTAL
10"	19,895 TN	13.05	260,000
1 1/2" (165 LB/SY)	2,831 TN	34.55	98,000
3" (330 LB/SY)	5,663 TN	34.54	196,000
4" (440 LB/SY)	6,040 TN	34.62	209,000
	3,262 GL	0.82	3,000
	0 LF	9.39	0
		MI	42,000
			77,000
BASE AND PAVING SUBTOTAL			\$843,000

LUMP ITEMS

- 1. TRAFFIC CONTROL
- 2. CLEARING AND GRUBBING
- 3. LANDSCAPING
- 4. EROSION CONTROL
- 5. SIGNING/STRIPING
- 6. OTHER

QUANTITY	UNIT COST	TOTAL
0.9 MI	41,000	37,000
27 AC	6,000	164,000
0.9 MI	80,002	72,000
0.9 MI	97,000	87,000
0.9 MI	19,321	17,000
0.9 MI	96,000	86,000
LUMP ITEM SUBTOTAL		\$463,000

Typical Section

Urban Widening: 2 To 4-Lanes with 14 ft Flush Median

Typical Section Length Miles

Right-of-Way Width Feet

GRADING AND DRAINAGE

- 1. EARTHWORK
 - a. Unclassified Excavation Soil
 - b. Unclassified Excavation Rock
 - c. Borrow Excavation
- 2. MINOR DRAINAGE

QUANTITY	UNIT COST	TOTAL
23490 CY	2.50	59,000
2610 CY	10.00	26,000
CY	3.72	
0.5 MI	\$353,479.01	177,000
GRADING AND DRAINAGE SUBTOTAL		\$262,000

BASE AND PAVING

- 1. GRADED AGGREGATE BASE
- 2. ASPHALT PAVING
 - a. Asph Conc 9.5 mm Superpave
 - b. Asph Conc 19 mm Superpave
 - c. Asph Conc 25 mm Superpave
 - d. Bituminous Tack Coat
- 3. CONCRETE PAVING
 - a. Curb and Gutter
 - b. Miscellaneous
- 4. OTHER PAVING

THICKNESS AND SPREAD RATE	QUANTITY	UNIT COST	TOTAL
10"	7,744 TN	13.05	101,000
1 1/2" (165 LB/SY)	1,500 TN	34.55	52,000
3" (330 LB/SY)	1,839 TN	34.54	64,000
4" (440 LB/SY)	2,452 TN	34.62	85,000
	1,300 GL	0.82	1,000
	6264 LF	9.39	59,000
	MI	\$52,177.07	0
			36,000
BASE AND PAVING SUBTOTAL			\$398,000

LUMP ITEMS

- 1. TRAFFIC CONTROL
- 2. CLEARING AND GRUBBING
- 3. LANDSCAPING
- 4. EROSION CONTROL
- 5. SIGNING/STRIPING
- 6. OTHER

QUANTITY	UNIT COST	TOTAL
0.5 MI	\$105,130.43	53,000
8 AC	6,000	47,000
0.5 MI	\$12,345.40	6,000
0.5 MI	\$58,594.24	29,000
0.5 MI	\$51,723.42	26,000
0.5 MI	\$120,592.11	60,000
LUMP ITEM SUBTOTAL		\$221,000

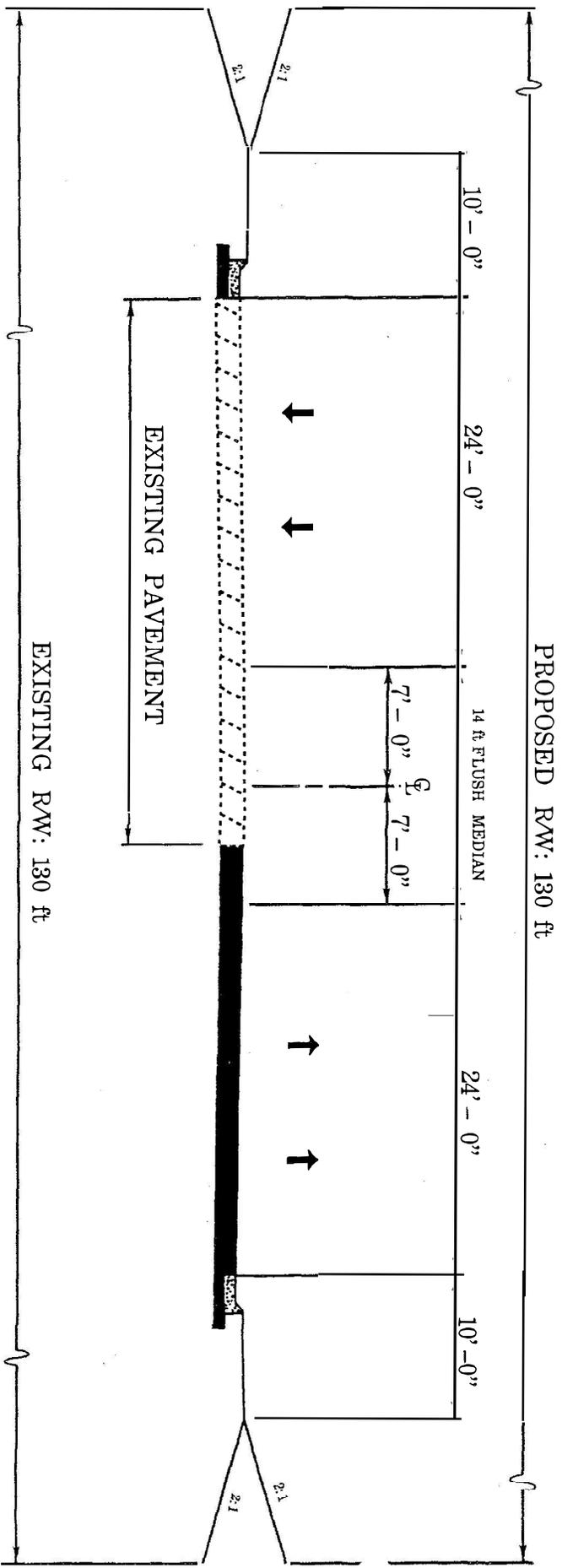
ESTIMATE SUMMARY

A. RIGHT OF WAY	\$	2,429,150
B. REIMBURSABLE UTILITIES	\$	LGPA to be requested at a later date

CONSTRUCTION COST SUMMARY

C. MAJOR STRUCTURES	\$	0
D. GRADING AND DRAINAGE	\$	1,534,000
E. BASE AND PAVING	\$	3,874,000
F. LUMP ITEMS	\$	3,048,000
G. MISCELLANEOUS	\$	0
H. SPECIAL FEATURES	\$	<u>0</u>
SUBTOTAL CONSTRUCTION COST	\$	8,456,000
E. & C. (10%)	\$	846,000
INFLATION (2 YRS. @ 5% PER YEAR)	\$	953,455
TOTAL CONSTRUCTION COST	\$	<u><u>10,255,000</u></u>

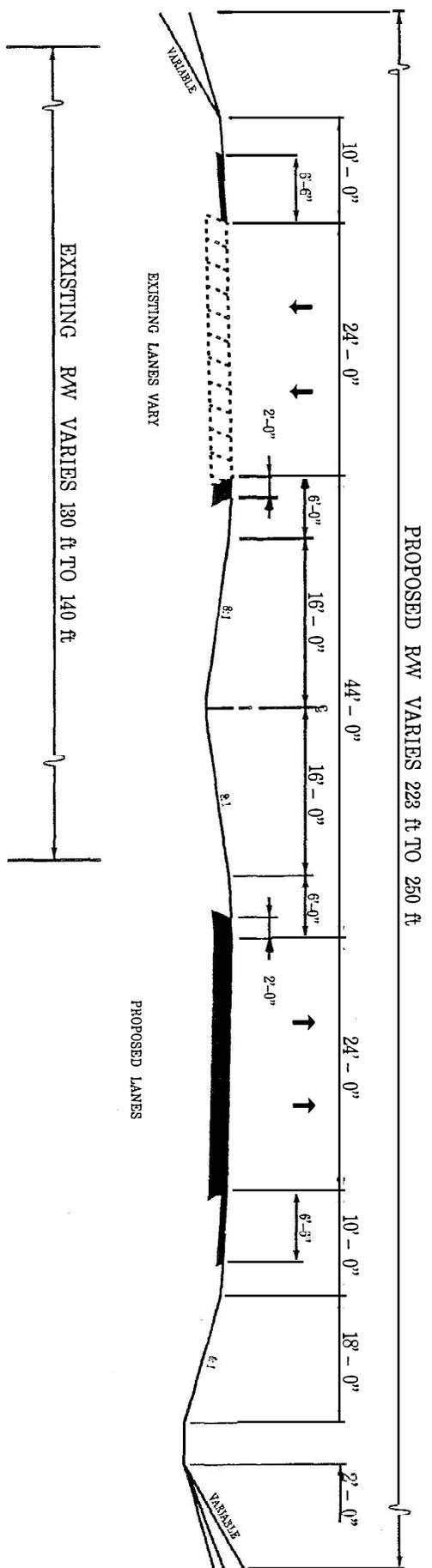
GRAND TOTAL PROJECT COST \$ 12,684,150



**EDS-545(31) JEFFERSON COUNTY
US 1 IMPROVEMENTS**

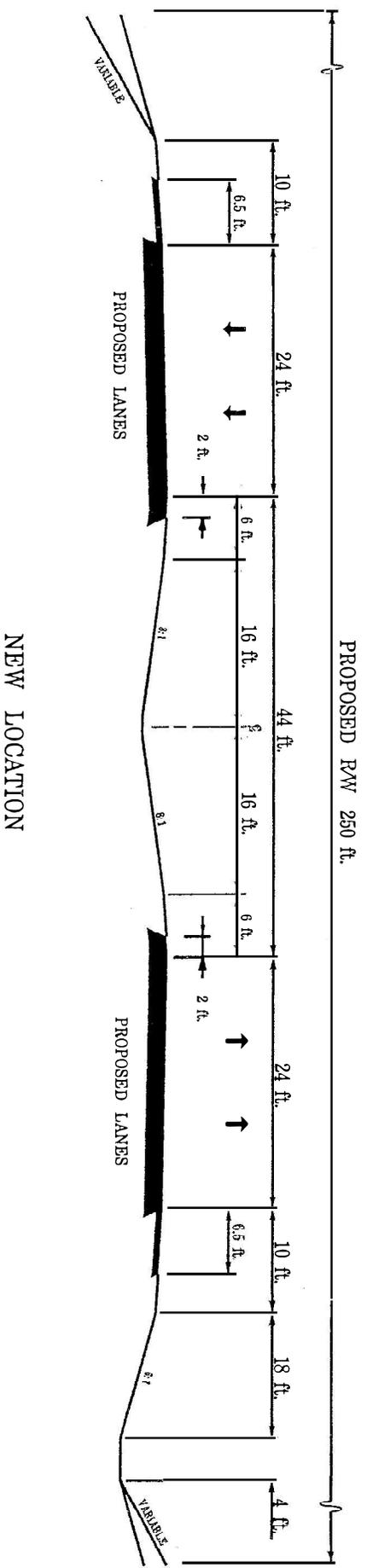
From CR 325 in Louisville
to 0.1 mile north of CR 304
in Louisville

NOT TO SCALE



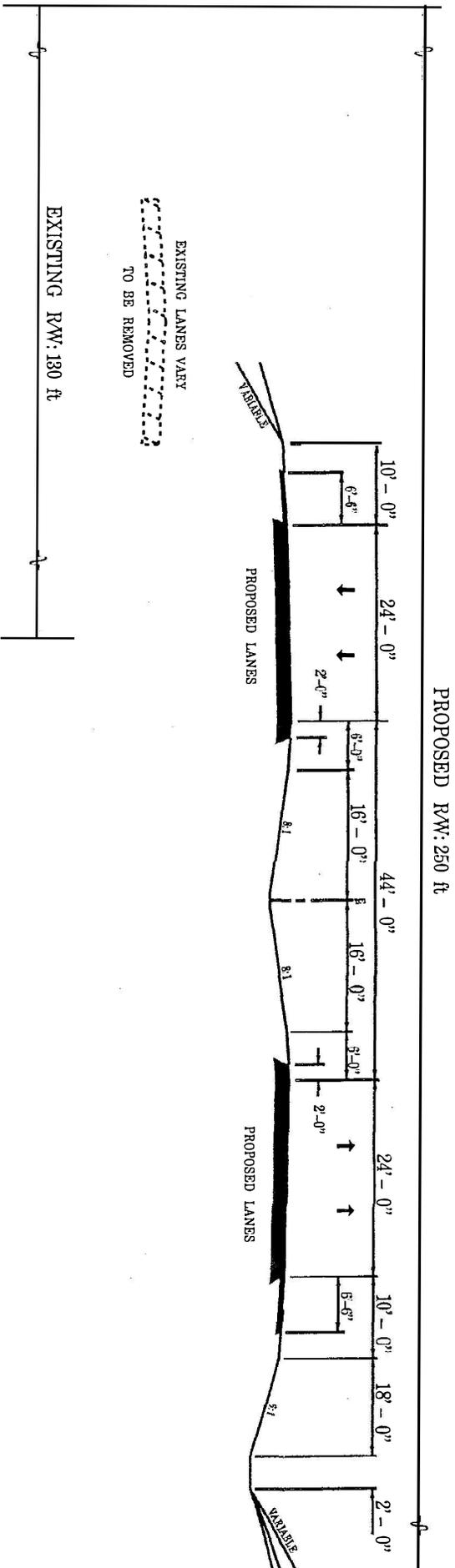
US 1 IMPROVEMENTS
FDS-545(31) JEFFERSON COUNTY
LIMITS SECTION APPLIES

- 1) From 0.1 mile north of CR 304 in Louisville to 1.0 miles south of CR 142
- 2) From 0.2 miles north of CR 141 to just south of SR 296
- 3) From 0.5 miles north of SR 296 to CR 138



US 1 IMPROVEMENTS
 EDS-545(31) JEFFERSON COUNTY
 LIMITS SECTION APPLIES

From 1.0 miles south of CR 142
 to 0.2 miles north of CR 141



US 1 IMPROVEMENTS
EDS-545(31) JEFFERSON COUNTY
LIMITS SECTION APPLIES

From just south of SR 296 to
 0.5 miles north of SR 296.

